

ORLOVA, N.V.; ZANTSEVA, Z.M.; KHOKHLOV, A.S.; CHERCHES, B.Z.

Some physiological characteristics of inactive mutants of  
Act. rimosus, an oxytetracycline producer. Antibiotiki 6  
no.7:629-635 JI '61. (MIRA 15:6)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov  
i Institut khimii prirodnkh soedineniy AN SSSR.  
(OF TETRACYCLINE) (ACTINOMYCES)

ZAYTSEVA, Z.M.; ALIKHANYAN, S.I.

Production and properties of new teracyclines. Antibiotiki 8  
no.6:551-556 Je'63 (MIRA 17:3)

MINDLIN, S. Z.; ZAYTSEVA, Z. M.; GERMANOV, A. B.; SHISHKINA, T. A.

"Genetic analysis of 'non-active' mutants of streptomyces rimosus."

report submitted for Antibiotics Cong, Prague, 15-19 Jun 64.

Inst Atomic Energy im I. V. Kurchatov, Moscow.

ZAYTSEVA, Z.M.; ORLOVA, N.V.

Studying the physiological characteristics of the Actinomyces  
rimosus mutant LC-T-572 in relation to the biosynthesis of  
oxytetracycline. Mikrobiologiya 31 no.3:449-453 My-Je '62.  
(MIRA 15:12)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.  
(TERRAMYCIN) (ACTINOMYCES)

ORLOVA, N.V.; SMOLENSKAYA, N.M.; ZAYTSEVA, Z.M.

Distribution of substances, stimulating the production of oxytetracycline by the *Act. rimosus* 1-572 mutant, among actinomycetes, fungi and bacteria. Mikrobiologiya 33 no.6:1032-1041 N-D '64. (MIRA 18:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov.

ZAYTSEVA, S.M.; MININ, S.F.

Production and properties of Act. aureofaciens isolates in  
sizing 6-demethylchlorotetracycline. Mikrobiologiya, 1965, 10,  
91-100. Ja-F '65. (Mikr. 1965)

1. Institut stenoy cherg() from E.V. Kurchatova.

ALIKHANYAN, S.I.; MINDLIN, S.Z.; ZAYTSEVA, Z.M.; ORLOVA, N.V.

Production of inactive mutants of *Actinomyces rimosus* and formation of the antibiotic during their joint cultivation. Dokl. AN SSSR 136 no.2:468-471 '61. (MIRA 14:1)

1. Predstavleno akademikom M.M. Shemyakinym.  
(ACTINOMYCES) (TERRAMYCIN)

SOV/20-59-124-2-55/71

On the Importance of Phosphorus to the Formation of Oxytetracycline

of growth and development establishes conditions for an intense formation of the antibiotic. As a consequence, the synthesis of oxytetracycline is inhibited by the excess of phosphorus. V. N. Shaposhnikov, Academician, supervised the work and gave valuable advice.- There are 3 figures, 1 table, and 18 references, 12 of which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov  
(All-Union Scientific Research Institute of Antibiotics)

PRESENTED: September 10, 1958, by V. N. Shaposhnikov, Academician

SUBMITTED: September 10, 1958

Card 3/3

SOV/20-59-124-2.55/71

## On the Importance of Phosphorus to the Formation of Oxytetracycline

low (less than 1  $\mu$ /mg per hour). Since the accumulation of the antibiotic takes place together with the transition of the culture into the second phase of development it was assumed that the secondary hyphae differ qualitatively from the primary ones. In order to prove this fact the phosphorus fractions of mycelium of the two nutrient media mentioned were investigated. As may be seen from table 2 the total content of phosphorus decreases during the development of the fungus at lower phosphorus concentration on the nutrient medium, especially during the transition into the second phase (24-48 hours). The maximum phosphorus content in the mycelium is shifted by 24 hours (instead of 16 hours) on the nutrient medium with an excess of phosphorus. The total content of phosphorus in the mycelium changes only somewhat during the development and remains high (about 2.0 %). Figure 3 shows the distribution of phosphorus between the acid-soluble and acid-insoluble fraction. The amount of phosphorus in the first fraction is hardly influenced by the amount of phosphorus on the nutrient medium (Fig 3, II). The excess of phosphorus on the nutrient medium leads to the enrichment of the mycelium with nucleic acids, especially during the second phase of development. The metabolism of nucleic acid determines the peculiarities of the vital cycle and culture. A special character

Card 2/3

17(2), 17(4)  
AUTHORS:

Zaytseva, Z. M., Orlova, N. V.

SOV/20-59-124-2-55/71

TITLE:

On the Importance of Phosphorus to the Formation of Oxytetracycline  
(K voprosu o znachenii fosfora dlya obrazovaniya oksitetratsiklina)

PERIODICAL:

Doklady Akademii nauk SSSR, 1959, Vol 124, Nr 2, pp 436-439 (USSR)

ABSTRACT:

It was found that *Actinomyces rimosus* produces the maximum quantity of oxytetracycline if the nutrient medium contains a certain amount of phosphorus (Ref 8). However, the mechanism of the effect of the phosphate on the biosynthesis of oxytetracycline is completely unknown. In the present paper the course of fermentation and the content of phosphorus fractions in the mycelium of *Act. rimosus* in breeding on a nutrient medium with an optimum phosphorus concentration (5mg-%) and with 20 mg-% were investigated. The stem LS-T-118 was investigated. The synthetic nutrient medium had been described already earlier (Refs 8,12). It may be seen from figure 1 that in the fermentation on a synthetic nutrient medium the excess of phosphorus accelerates the growth of the fungus and increases the accumulation of the biomass (Fig 1,1). In this case also larger amounts of carbohydrates (II) and nitrogen (III) as well as of succinic acid (IV) are consumed more rapidly. The production of oxytetracycline is reduced to 1/5 - 1/6 and the productivity of mycelium is very

Card 1/3

ZAYTSEVA, Z.M.; MIKHAYLOVA, G.R.

Effect of phosphorus on the growth and development of *Actinomyces*  
*rimosus*. Mikrobiologiya 28 no.6:863-869 N-D '59. (MIRA 13:4)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov,  
Moskva.

(ACTINOMYCES pharmacol.)  
(PHOSPHATES pharmacol.)  
(TETRACYCLINE chem.)

ZAYTSEVA, Z.M.; ORLOVA, N.V.

Studying the conditions of oxytetracycline (tetracycline) formation by *Actinomyces rimosus* (strain LS-T-118) cultures.  
Mikrobiologiya 28 no.2:216-223 Mr-Apr '59. (MIRA 12:5)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov, Moskva.

(OXYTETRACYCLINE, metab.

*Actinomyces rimosus* synthesis (Rus))

(ACTINOMYCETES, metab.

*rimosus*, oxytetracycline synthesis (Rus))

ZAYTSEVA, Z. M., Candidate of Biol Sci (diss) -- "A study of the conditions of formation of oxytetracycline in a culture of *Act. rimoeus* LS-T-118". Moscow, 1959. 16 pp (Moscow State Order of Lenin U in Lomonosov), 120 copies (XI, No 22, 1959, 111)

SOV/20-121-2-46/53

A Synthetic Medium for the Biosynthesis of Oxytetracycline (Terramycin) in  
the Culture of *Act. rimosus* LS-T-118

fermentation its accumulation in considerable quantities sets in,  
and its concentration is highest after 100 - 120 hours. The  
medium supplies stable reproducible results and therefore may  
be used for physiological investigations of the biosynthesis  
of oxytetracycline. There are 4 tables and 8 references, 5 of  
which are Soviet.

ASSOCIATION: Vsesoyuznyy nauchno-issledovatel'skiy institut antibiotikov  
(All-Union Scientific Research Institute for Antibiotics)

SUBMITTED: April 9, 1958

Card 3/3

SOV/20-121-2-46/53

A Synthetic Medium for the Biosynthesis of Oxytetracycline (Terramycin) in the Culture of *Act. rimosus* LS-T-118

eral substances the following composition was selected:  
 starch 3%, glucose 0,2%,  $(\text{NH}_4)_2\text{SO}_4$  0,1%,  $\text{NH}_3$  0,1%, succinic acid 0,46%,  $\text{K}_2\text{HPO}_4$  0,03%,  $\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$  0,01%,  $\text{FeSO}_4 \cdot 7\text{H}_2\text{O}$  0,001%,  $\text{MnCl}_2$  0,0008%. Distilled water was used. The pH is brought down to 7,3 - 7,4 prior the sterilization, and after it it is kept at about 6,7 - 6,9. The sterilization is carried out at 0,8 atmospheres of excess pressure for 30 minutes. The data characterizing the growth of terramycin producers are given in table 4. From it may be seen that the pH is maintained within a range (6,0 - 7,0) favorable for the development of the producers. Carbohydrates and nitrogen are utilized relatively quickly and they are almost completely used up toward the end of the fermentation. The quick growth of the producers corresponds to this phenomenon. The weight of the mycelium reaches its maximum after 70 - 80 hours and amounts to 750 - 850 mg-%. The absence of any spore formation is characteristic for this medium. An average of 1 500 - 1 900  $\mu$ /ml oxytetracycline is formed on the medium recommended. After 24 hours of

Card 2/3

SOV/20-121-2-46/53

AUTHORS: Shaposhnikov, V. N., Member, Academy of Sciences, USSR,  
Zaytseva, Z. M., Orlova, N. V.

TITLE: A Synthetic Medium for the Biosynthesis of Oxytetracycline  
(Terramycine) in the Culture of Act. rimosus / -T-118  
(Sinteticheskaya sreda dlya biosinteza oksitetratsiklina  
(terramitsina) kul'turoy Act. rimosus LS-T-118)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 121, Nr 2, pp. 366-369  
(USSR)

ABSTRACT: A precisely determined composition of the medium is very im-  
portant in the investigation of many problems of the physiol-  
ogy of micro-organisms. The medium is to secure the formation  
of antibiotics in great quantities when they are investigated.  
Such a medium is not known for Actinomyces rimosus as most of  
the descriptions published do not meet such demands. Therefore  
the authors carried out the present investigation. The sowing  
material of the race mentioned in the title was grown on a syn-  
thetic medium of maize-extract ashes, and then on the medium  
described lateron. The tables 1 - 3 show the average results  
of three experiments. According to several variables with sev-

Card 1/3

ZAYTSOVA, E.K.

Let us increase the production of caramel. Khleb. i kond. prom. 1 no.5:  
29-30 My '57. (MLRA 10:6)

(Caramel)

AKOL'ZIN, P.A., doktor tekhn.nauk; KOROLEV, N.I., inzh.; LAZAREVA, K.I.,  
inzh.; ZAYTSEVA, Z.I., inzh.; POLOVINKINA, T.A., teknik

Use of film-forming amines for preventing corrosion in condenser  
systems. Teploenergetika 8 no.3:49-52 Mr. '61. (MIRA 14:9)

1. Vsesoyuznyy teplo tekhnicheskii institut - Leningrad.  
(Condensers (Steam))--Corrosion

L 29691-66

ACC NR: AP6008810

by A. P. Palkina directed by V. S. D'yakonova. Orig. art. has: 1 figure and 1 table. 2

SUB CODE: 13/

SUBM DATE: none

Card 2/2 CC

L 29691-66 EWP(k)/ENT(d)/ENT(m)/EWP(h)/T/EWP(l)/EWP(v)/EWP(t)/ETI IJP(c) JD/HM  
 ACC NR: AP6008810 SOURCE CODE: UR/0130/65/000/011/0050/0052

AUTHORS: Benyakovskiy, M. A.; Savvin, M. V.; Zaytseva, Z. I. 44  
 42

ORG: Cherepovetsk Metallurgical Factory (Cherepovetskiy metallurgicheskiy zavod) B

TITLE: Modification of butt welding machine 1700 4

SOURCE: Metallurg, no. 11, 1965, 50-52

TOPIC TAGS: pickling, steel alloy, sheet metal, welding inspection,  
butt welding, welding equipment, seam welding/1700 butt welding machine,  
08-10kp steel alloy, st 1-3kp steel alloy

ABSTRACT: To decrease the number of broken (in 1964: 61.7% for 2.75 mm sheet; 31.7 for 2.75; 29.5 for 3.0; 22.5 for 3.5, and 12.1 for 4.5 mm) and defective (30.4; 24.9; 19.9; 20.4, and 11.1% respectively) welds in the pickling of 08-10kp and St 1-3kp steel alloy sheets, the welding parameters were investigated and machine 1700 was modified. After testing the butt welds produced under different welding regimes and establishing the correct operating ranges, a more stringent tolerance on allowed electrode wear (1000--1200 seams) was established, and several changes on the machine were performed. These included raising of the inlet scrapers, decreasing the seam height, optimizing the seam trimmer, adding guiding rolls, etc. As a result of these changes, the incidence of defective welds has been reduced by a factor of  $\approx 2.5$  to 7.4--8.6%. The metallographical investigations were performed

Card 1/2

Riboflavin Released From Vegetable Proteins Isolated by 0,2% NaOH 20-2-38/60

flavin in other plants, too, than it was possible by the methods hitherto used. All this opens up new ways of the investigation of riboflavin and causes a revision of the opinions on the content of riboflavin in its natural sources. There are 3 tables, and 5 references, 3 of which are Slavic.

ASSOCIATION: Institute for Biochemistry AN USSR imeni A. N. Bakh  
(Institut biokhimii im. A. N. Bakha Akademii nauk SSSR)  
Institute for Plant Physiology AN USSR imeni K. A. Timiryazev  
(Institut fiziologii rasteniy im. K. A. Timiryazeva Akademii nauk SSSR)

PRESENTED: October 1, 1957, by A. L. Kursanov, Academician

SUBMITTED: August 27, 1957

AVAILABLE: Library of Congress

Card 3/3

20-2-38/60

## Riboflavin Released From Vegetable Proteins Isolated by 0,2% NaOH

0,2 % NaOH and 70 % ethyl alcohol. Riboflavin was determined in the extracts a) without proteolysis (the form hydrolyzable with acid) and b) with proteolysis (firmly bound form). From table 1 it is to be seen that the largest quantity of riboflavin is contained in the alkali-soluble fraction. In the determination of riboflavin by the same methods but without fractionation a much smaller quantity was determined than after fractionation. These results indicate that much more riboflavin is contained in plants than could be determined by the methods hitherto applied. The optimum conditions of an alkaline extraction of riboflavin from wheat were also studied. These were : a 0,2% solution of NaOH at 0°C for 3 hours in darkness. The nature of the process of separation of riboflavin from protein is not yet clear, but an optimum pH (up to 8,0) must be preserved in this connection. The determined high contents of riboflavin in wheat induced the authors to carry out retests on a microbiological way. Riboflavin was destroyed in parallel extracts by ultraviolet radiation (for 3 hours) at pH 12. The results are given in table 2. They fully confirmed the results of the chemical analysis, as no riboflavin was found in the radiated extracts. Finally the authors fluorometrically determined riboflavin in peas, corn and sunflower seeds. Table 3 shows that by a treatment with alkalis it was possible to find much larger quantities of ribo-

Card 2/3

Zaytseva, Z.I.

20-2-38/60

AUTHORS: Zaytseva, Z. I. , Povolotskaya, K. L.

TITLE: Riboflavin Released From Vegetable Proteins Isolated by 0,2% NaOH  
(Riboflavin, osvobozhdayemyy iz rastitel'nykh belkov, vydelennykh  
0,2% NaOH)

PERIODICAL: Doklady AN SSSR, 1958, Vol. 118, Nr 2, pp. 338 - 339 (USSR)

ABSTRACT: Riboflavin closely combined with protein occurs in plant tissues in considerable quantities (reference 1). It is released in an alkaline medium (pH 7,8) by proteolysis. It was found that the quantity of the firmly bound form of riboflavin increases during the germination of seeds and the ripening of fruits and vegetables, whereas it decreases during the conservation of fruits and vegetables. In the isolation of this form of riboflavin from the protein-molecule riboflavin is separated as flavin-adenine-dinucleotide. It apparently forms the prosthetic group of those enzymes which are closely connected with the cellular structures (proofs see in references 3-5). Further investigations of the authors were directed to the determination of the distribution of the form of riboflavin which is closely connected with protein among the individual protein fractions. As test material they chose wheat flour which was successively extracted with distilled water, 5% NaCl,

Card 1/3

The prevention of oxygen and carbonic acid corrosion of power equipment by means of octadecylamine.

BOV/96-58-10-13/25

Steam is bubbled through the molten mass to pick up the required quantity of material. Preliminary operating results can now be given. The method of injecting the octadecylamine proved satisfactory in service. When the concentration of the substance in the steam was 3 - 4 mg/kg, the iron content of the condensate was reduced by a factor of 10 to a stable value of 0.05 mg/l Fe. This occurred on the third day after the reagent was first used. There have been no unfavourable effects, except for the appearance of a little ammonia in the boiler steam. Steam without additive can be delivered for some hours without ill effect. Attempts will be made to replace octadecylamines by a cheaper mixture of polyamine homologues. This method of treatment will probably be useful in other applications. There is 1 figure.

ASSOCIATION: All-Union Thermo-Technical Institute (Vsesoyuznyy Teploekhnicheskiy Institut)

Card 2/2

AUTHORS: Akol'zin, P.A. (Dr. Tech. Sci.)  
Zaytseva, Z.I. (Engineer)  
Lazareva, K.I. (Engineer)

SOV/90-58-10-13/25

TITLE: The prevention of oxygen and carbonic acid corrosion of power equipment by means of octadecylamine. (Preduprezhdeniye kislородnoy i uglekislotoy korrozii energeticheskogo oborudovaniya s pomoshch'yu oktdetsilamina)

PERIODICAL: Teploenergetika, 1958, <sup>5</sup>No. 10, pp. 54-55 (USSR)

ABSTRACT: At regional power station No. 7. of Lenenergo, a considerable proportion of the boiler feed-water is condensate returned from industrial consumers; it contains up to 2 mg/l oxygen and 4 - 5 mg/l CO<sub>2</sub>. The presence of these gases gives rise to corrosion troubles, which are described. The troubles occur largely on consumers' equipment where it is not possible to remove the oxygen and carbon dioxide. Accordingly, octadecylamine, a film-forming substance, is added to the steam. The main properties of Octadecylamine are stated. It is protective because adsorbed monomolecular film forms on metal surfaces wetted by water containing it. At the power station, octadecylamine was added to the turbine pass-out steam by means of the measuring device illustrated in the sketch. This device comprises two tanks, one of which contains the molten reagent under steam pressure.

Card 1/2

Energetik, 3, 6-8, Mr 1955

AID P - 1923

Card 2/2 Pub. 29 - 3/31

Institution: None

Submitted : No date

AID P - 1923

ZAYTSEVA, Z.I.

Subject : USSR/Electricity

Card 1,2 Pub. 29 - 3/31

Author : Zaytseva, Z. I., Eng.

Title : Ammonium feed-water treatment of high pressure boilers

Periodical : Energetik, 3, 6-8, Mr 1955

Abstract : In the electric power stations of the LENENERGO (Leningrad Power System) the high-pressure boilers were fed with pure condensate. Several damages were observed in feed-pumps, economizers and regenerative preheaters, as well as hard scale in boiler drums and on turbine blades. The cause was found in the aggressive action of feed-water due to the presence of free carbon dioxide. Ammonium treatment was applied according to a method described by the author. Results obtained were very favorable and permitted increasing the operating time of most of the boiler equipment 2 to 3 times. Two diagrams.

ZAYTSEVA, Z.I.

BUKIN, V.N., professor; KUTSEVA, L.S.; ZAYTSEVA, Z.I.

Natural sources of vitamin B<sub>12</sub>. Vit.res. 1 ikh isp. no.2:286-  
297 '54. (MLRA 8:10)

1. Institut biokhimii im. A.N.Bakha Akademii nauk SSSR.  
(Vitamins-B)

ZAYTSEVA, Z.I.

USRA

Preservability and content of vitamins B<sub>1</sub>, B<sub>2</sub> and PP in bread from various grades of flour. L. Ye. Abramson, N. D. K. Z. I. Zaitseva, L. B. Kabanov, V. V. Pashchenko, and V. V. Shcherbakova (A. N. Bauman Inst. Technol., Acad. Sci. U.S.S.R., Moscow). Zhurnal Prikladnoi Khimii, 1964, 37, 62-63 (1964). — The natural content of vitamin B<sub>1</sub> in the flour is related to 10% in the bread made from rye wholeflour flour, 10% for wheat wholeflour flour and 60-80% for wheat flour of 1st and 2nd grades. Natural vitamin B<sub>2</sub> is preserved in the bread for the extent of 70, 78, and 84-92%, resp. Vitamin PP is almost completely preserved (80-100%). The vitamins added to the bread artificially show lower preservability when baked and are 60% in rye for all 3 vitamins, while in wheat it is 78-80% for vitamin B<sub>1</sub>, 80-85% for vitamin PP, and 10-14% for vitamin B<sub>2</sub>. O. M. Kabanov.

ZAYTSEVA, Z. I.

Vitamins B<sub>1</sub>, B<sub>2</sub>, and PP in bread from different kinds of flour. V. N. Bukin, L. Ya. Auerman, Z. I. Zaitseva, L. S. Zaitseva, V. P. Pashovkin, and V. V. Sheherbatenko (A. N. Bakh Inst. Biochem. and All-Union Sci. Research Inst. Bread-Baking Ind., Moscow). *Voprosy Pitanija* 12, No. 4, 39-34(1953).—Of the vitamins naturally occurring in the flour, bread retains for rye flour and wheat flour, resp., B<sub>1</sub> 70 and 80-8%, B<sub>2</sub> 88 and 64-79%, PP 95-100 and 95-100%. The retention of vitamins B<sub>1</sub> and B<sub>2</sub> by wheat bread varies with the grade of the flour. Of added vitamins, rye bread retains 1/3 of B<sub>1</sub>, B<sub>2</sub>, and PP; wheat bread retains B<sub>1</sub> 75-80, B<sub>2</sub> 60-64, and PP 80-9%. Part of the vitamin B<sub>1</sub> in the flour is firmly combined with protein, and may escape estn. Fermentation of the dough frees the vitamin B<sub>1</sub>, and thus seemingly high figures are obtained for bread, masking the deterioration. Rye and wheat contain 3 mg./kg. of vitamin B<sub>1</sub>. Instead of the previously reported 1 mg./kg. For an adult engaged in light labor it is necessary to enrich all sorts of bread with vitamin B<sub>1</sub>, rye bread with vitamin PP, and some kinds of wheat bread with vitamins B<sub>1</sub> and PP. A. Mirkin

ZAYTSEV, P.M.; TUR'YAN, Ya.I.; ZAYTSEVA, Z.G.

Polarographic study of the kinetics and the mechanism of protolytic reactions underlying nitro-aci-tautomeric conversions of nitrocyclohexane. Kin. i kat. 4 no.4:534-538 J1-Ag '63.  
(MIRA 16:11)

1. Liscichanskiy filial Gosudarstvennogo nauchno-issledovatel'skogo i proyektnogo instituta azotnoy promyshlennosti i produktov organicheskogo sinteza i Yaroslavskiy nauchno-issledovatel'skiy institut monomerov.

1ST AND 2ND ORDERS		PROCESSING AND PRESENTATION		3RD AND 4TH ORDERS	
<p>24</p> <p>Conditions for the formation of explosive mixtures in petroleum-storage reservoirs. Z. A. Zaitseva. <i>Acad. Sci. USSR Div. Chem. Petrol. Ind.</i> 1938, No. 2, 30-8. Cracked gasoline does not form explosive mixts. at temps. exceeding <math>-10^{\circ}\text{C}</math>. Straight-run gasoline with an initial b. p. below <math>60^{\circ}</math> gives explosive mixts. below <math>0^{\circ}</math>, i. e., in winter time. Naphtha is the most dangerous product during the summer for storage and transportation; naphtha with an initial b. p. of <math>70^{\circ}</math> to <math>135^{\circ}</math> will give an explosive mixt. between <math>0^{\circ}</math> and <math>30^{\circ}</math>. The expts. are described and the results tabulated. A. A. Borzhinsk</p>					
<p>ASD-11A METALLURGICAL LITERATURE CLASSIFICATION</p>					

Y  
ZASTIGVA, Z A

USSR:

IN: 'ANTHRA THERMIST OF FINE WATER FOR FINE THERMIST ANTHERA  
ANTHERA T.A. (HARVEST FOR THE, HANSON), 1975, 4-51.  
Experiments in this method of harvesting water are  
usually in food water are recorded. (b).

ZAYTSEVA, Z.A.; ROTSHTYN, R.I.

Clinical aspects and therapy of infantile gastroenteritis. Zdravookhraneni 2 no.1:37-39 Ja-P '59. (MIRA 12:7)

1. Iz respublikanskoy detskoy klinicheskoy bol'nitsy (glavnyy vrach N.T. Gordeyeva) i kafedry detskikh bolezney (zav. - dotsent A.I. Miloserdova) lechebnogo fakul'teta Kishinevskogo meditsinskogo instituta.

(INFANTS (NEWBORN) - DISEASES) (ANTIBIOTICS)  
(DIARRHEA)

NIGIYEV, M.F.; KARAMZIN, P.V.; ZAYTSEVA, Z.A.

Theory of reactors operating with the recycling system  
(on temperature gradient). Azerb. khim. zhur. no.1:  
105-110 '64. (MIRA 17:5)

NAGIYEV, M.F.; KARAMZIN, P.V.; ZAYTSEVA, Z.A.

Theory of reactors operating with total recycling; on the concentration gradient. Azerb. khim. zhur. no.5:79-84 '63  
(MIRA 17:8 )

ZAYTSEVA, Z.

Ink for thermographs. Mas.ind.SSSR 26 no.4:54 '55. (MIRA 8:10)

1. Kurganskiy myasokombinat  
(Marking devices)

ZAYTSEVA, Z., prepodavatel'

Improve practice in using the accredited form of payments. Den.  
1 kred. 20 no.11:53-54 N '62. (MIRA 16:1)

1. Odesskiy kreditno-ekonomicheskiy institut.

(Odessa Province--Payment)

ZAYTSEVA, Z.

Preserving tin cans from rust. Mias.ind.SSSR 31 no.2:47 '60.  
(MIRA 13:8)

1. Kurganskiy myasokombinat.  
(Kurgan--Tin cans)

ABROSKIN, B.; FERDMAN, M.; MALYSH, V.; ZAYTSEVA, Z., преподаvatel';  
CHELIKIDI, V.; VOLKOV, I.; KLAPISHEVSKIY, L.

Expand payments by checks. Den.i kred. 21 no.2:60-66 F '63.  
(MIRA 16:2)

1. Upravlyayushchiy Gukovskim trestom ugol'nykh predpriyatiy kombinata Shakhtantratsit Ministerstva ugol'noy promyshlennosti SSSR (for Abroskin). 2. Glavnyy bukhgalter Gukovskogo tresta ugol'nykh predpriyatiy kombinata Shakhtantratsit Ministerstva ugol'noy promyshlennosti SSSR (for Ferdman). 3. Upravlyayushchiy Gukovskim otdeleniyem Gosbanka (for Malysh). 4. Odesskiy kreditno-ekonomicheskoy institut (for Zaytseva). 5. Nachal'nik planovo-ekonomicheskogo otdela Sumskoy oblastnoy kontory Gosbanka (for Chelikidi). 6. Starshiy ekonomist planovo-ekonomicheskogo otdela Sumskoy oblastnoy kontory Gosbanka (for Volkov). 7. Glavnyy bukhgalter Kiyevskoy transportno-ekspeditsionnoy kontory (for Klapishevskiy).  
(Checks)

ZAYTSEVA, Yelena Ivanovna, doktor med.nauk, prof.; STEPANOV, Pavel  
Nikolayevich, doktor med. nauk, prof.; VALIKOVA, K., red.;  
SAKHONENKO, Ye., tekhn. red.

[Textbook on the clinical examination of patients] Posobie  
k klinicheskomu issledovaniyu bol'nogo. Izd.4., dop. i pe-  
resmotrennoe. Smolensk, Smolenskoe knizhnoe izd-vo, 1963.  
267 p. (MIRA 16:7)

1. Zaveduyushchaya kafedroy propedevtiki vnutrennikh bo-  
lezney Smolenskogo meditsinskogo instituta (for Zaytseva).
  2. Zaveduyushchiy kafedroy fakul'tetskoy terapii Smolen-  
skogo meditsinskogo instituta (for Stepanov).
- (DIAGNOSIS--HANDBOOKS, MANUALS, ETC.)

ZAYTSEVA, Yelena Fedorovna

Of the Nervous Mechanism Actions in Intravenous Infusion of Hypertonical  
Solutions in 'coagulation' (svertyvayemost') Blood

Dissertation for candidate of a Medical Science degree. Chair of Normal  
Physiology, (head, Prof. Ye. S. Ivanitskiy-Vasilenko), Saratov Medical  
Institute, 1955.

POTAPENKO, Ya.I.; LUK'YANOV, A.D.; LAZAREVSKIY, M.A.; DYUZHEV, P.K.;  
ZAKHAROVA, Ye.I.; KOVALEV, A.A.; RUZAYEV, K.S.; NECHAYEV, L.E.;  
BASAN'KO, A.A.; MASHINSKAYA, L.P.; ALIYEV, A.M.; MANOKHIN, P.A.;  
LITVINOV, P.I.; KOROTKOVA, P.I.; ZAYTSEVA, Yu.F.; GRAMOTENKO, P.M.;  
TAIROVA, V.N., red.; PROKOF'YEVA, L.N., tekhn.red.

[Viticulture] Vinogradarstvo. Moskva, Gos.izd-vo sel'khoz.lit-ry,  
1960. 612 p. (MIRA 14:1)

(Viticulture)

ZAYTSEV Ye V

5

The pyrimidine component of vitamin B<sub>12</sub>. I. A. Rubzov, Ye. V. Zaytsev, Ye. V. Zaitsev, and N. A. Fedorovich, *Tr. Khim. Prirod. Soedin. (Leningrad. Khim. Inst. 1963, 10-31, 1963)*. Three new modifications of the synthesis of the pyrimidine component of vitamin B<sub>12</sub> are presented: (1) synthesis of 2-methyl-4-amino-5-cyanopyrimidine (I) from  $\text{AcOCH}_2\text{C(CN)}_2$  (II) or (2) from  $\text{HOCH}_2\text{C(CN)}_2$  (III) by the condensation with acetamide (IV), and (3) synthesis of 2-methyl-4-amino-5-carboethoxypyrimidine (V) from  $\text{H}_2\text{NCH}_2\text{C(CN)CO}_2\text{Et}$  (VI) and  $\text{MeCSNH}_2$  (VII). V is also readily obtained by condensation of  $\text{HOCH}_2\text{C(CN)CO}_2\text{Et}$  (VIII) with IV.  $\text{CH}_3\text{C(CN)}_2$  (IX) condenses readily with esters of formic acid in the presence of K or Na alcoholates, forming 90%  $\text{HOCH}_2\text{C(CN)}_2$  (X), non-hydrolyzable by  $\text{H}_2\text{O}$ , neutral reaction in  $\text{H}_2\text{O}$ . X and IV, HCl form an adduct, compd., X, V, m. 63-5° (decomps.). With  $\text{HCl}$  X formed II, a heavy oil, readily turning brown on standing, b.p. 102-4°,  $n_D^{20}$  1.4818,  $d_4^{20}$  1.1885, requiring 2 moles alkali for titration. The pyrimidine component of vitamin B<sub>12</sub> is more readily synthesized by 1, since VII is obtained more easily than IV. The intermediate product VIII reacts quantitatively with aq.  $\text{NiCl}_2$  solns., forming VI, m. 140-2°, by treating VI with  $\text{LiAlH}_4$  in  $\text{Et}_2\text{O}$  2-methyl-4-amino-5-hydroxymethylpyrimidine is obtained (57-60%), which can be used further for the synthesis of vitamin B<sub>12</sub>. B. Wierucki

6

BARAMBOYM, N.K., doktor khim.nauk, prof.; ZAYTSEVA, Ye.V., inzh.

Effect of the composition of the solution and of the drying system on the microstructure and moisture permeability of nonplasticized polyamide films. Izv.vys.ucheb.zav.; tekhn.leg. prom. no.5:38-44 '59. (MIRA 13:4)

1. Moskovskiy tekhnologicheskii institut legkoy promyshlennosti.  
Rekomendovana kafedroy tekhnologii iskusstvennoy kozhi.  
(Leather, Artificial) (Polyamides)

ZAYTSEVA, Ye.V. [Zaitseva, YE.V.] (Dnepropetrovsk)

Stability of multiloop automatic systems with special functional coupling superposed on the controlled coordinates. Avtomatyka 10 no.2:17-20 '65. (MIRA 18:6)

BOJAROVA, E.S.; ZAYTSEVA, Ye.V.

Finishing preparations for fibers based on the copolymers of acrylonitrile.  
Khim.volokna.6:28-31 '64. (USSR 1964)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut lagun. Vostochnyye volokna.

MASLENNIKOV, K.N.; ZAYTSEVA, Ye.V., staryiy nauchnyy sotrudnik

Use of avivage preparations in the manufacture of viscose staple. Tekst. prom. 24 no.5:13-15 My '64 (MIRA 18:4)

1. Rukovoditel' gruppy tekstil'noy pererabotki Vsesoyuznogo nauchno-issledovatel'skogo instituta iskusstvennogo volokna (for Maslennikov). 2. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (for Zaytseva).

MASLENNIKOV, K.N., nauchnyy sotrudnik; ZAYTSEVA, Ye.V., nauchnyy sotrudnik;  
KANTER, D.TS., nauchnyy sotrudnik; OBUKHOVA, R.N., nauchnyy sotrud-  
nik; BULANOVA, I.G., nauchnyy sotrudnik; GORDEYEV, M.A.; SURNINA,  
N.M.

"Xylital O-15" preparation for the avivage of viscose staple fi-  
bers produced by the cotton spinning method. Tekst.prom. 24 no.1:  
40-43 Ja '64. (MIRA 17:3)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo volokna (for Maslennikov, Zaytseva, Kanter, Obukhova, Bulanova).
2. Glavnyy inzh. Yakhromskoy pryadil'no-tkatskoy fabriki (for Gordeyev).
3. Zaveduyushchiy proizvodstvennoy laboratoriyey Yakhromskoy pryadil'no-tkatskoy fabriki (for Surnina).

CHESUNOV, V.M., inzh.; ZAYTSEVA, Ye.V., inzh.

Evaporation of solvent mixtures from the polyamide solution  
and formation of the porous structure of films. Izv. vys.  
ucheb. zav.; tekhn. leg. prom. no.3:36-41 '63. (MIRA 16:7)

1. Moskovskiy tekhnologicheskiy institut legkoy promyshlennosti.  
Rekomendovana kafedroy neorganicheskoy i analiticheskoy khimii.  
(Leather, Artificial) (Polyamides)

ZAYTSEVA, Ye.V., inzh.; BARAMBOYM, N.K., doktor khimicheskikh nauk,  
prof.

Effect of the composition of the solution and of the drying  
temperature on the structure of polyamide films. Izv. vys.  
ucheb. zav.; tekhn. leg. prom. no.2:25-30 '60. (MIRA 13:11)

1. Moskovskiy tekhnologicheskii institut legkoy promyshlennosti.  
Rekomendovana kafedroy tekhnologii iskusstvennoy kozhi.

(Leather, Artificial) (Polyamides)

MAITSEVA, Ye. V., SERBRYAKOVA, Z. G.

New preparations of combing oils for viscose staple fiber.  
Khim. volok. no.2:74-75 '59. (MIRA 12:9)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut iskusstvennogo  
volokna.

(Rayon)

L 00346-66

ACCESSION NR: AP5014212

systems with the equations of the initial systems identical or differing by a constant factor. Orig. art. has: 19 formulas and 1 figure.

ASSOCIATION: none

SUBMITTED: 02Apr64

ENCL: 00

SUB CODE: IE

NR REF SOV: 004

OTHER: 000

Card

2/2

L 00546-66 EWT(d)/EWP(y)/EWP(k)/EWP(h)/EWP(1) LJP(c) BC

ACCESSION NR: AP5014212 /

UR/0102/65/000/002/0017/0020

AUTHOR: Zuytseva, Ye. V. (Dnipropetrovs'k [Dnepropetrovsk])

TITLE: On the stability of multiloop automatic systems with special functional feedback imposed on the controlled coordinates

SOURCE: Avtomatyka, no. 2, 1965, 17-20

TOPIC TAGS: automatic control design, control system stability, feedback control, servomechanism

ABSTRACT: Conditions are sought which would allow to determine the stability of a system as a whole from the equations of the separate systems which constitute a multiloop system and the character of the feedback. The article considers a multiloop control system constructed by the "harmonic" principle of individual identical systems. The "harmonic relations" are assumed to be proportionality relations between the controlled parameters, the control signals-- the mean harmonic deviations from an external set-point. The stability of such systems depends essentially on the eigenvalues of the feedback matrices and the stability of the initial open-loop state of the system. The resultant stability condition can be utilized when dealing with multiloop systems consisting of  $n$  initial systems described by identical equations, and also when dealing with multidimensional servo

Card 1/2

ZAYTSEVA, Ye.V., inzh.; BARAMBOIM, N.K., prof., doktor khimicheskikh  
nauk

Effect of the drying method on the microstructure and moisture permeability of plasticized polyamide films. Izv.vys.ucheb. zav.; tekhnolog.prom. no.6:23-27 '59. (MIRA 13:5)

1. Moskovskiy tekhnologicheskii institut legkoy promyshlennosti.  
Rekomendovana kafedroy tekhnologii iskusstvennoy kozhi.  
(Leather substitutes) (Polyamides)

**ZAYTSEVA, Ye.N.**

Wild tulip species and their cultivated forms in the collection  
of the Main Botanical Garden. Biul.Glav.bot.sada no.26:48-52 '56.  
(MLRA 10:2)

1.Glavnyy botanicheskiy sad Akademii nauk SSSR.  
(Moscow---Tulips)

HYACINTHUS, IG.

Hyacinths in the 1st Botanical Garden. Anal. G. 1st. 1st.  
order no. 40:27-32 1st. (100 3/4:3)

1. Glavnyy botanicheskiy sad II SSSR.  
(Moscow--Hyacinths)

ZAYTSEVA, Ye.N.

Collection of cultivated tulip forms in the Main Botanical Garden.  
Biul.Glav.bot.sada no.27:51-54 '57. (MLRA 10:5)

1.Glavnyy botanicheskiy sad Akademii nauk SSSR.  
(Moscow—Tulips)

KASPARYAN, A.S.; ZAYTSEVA, Ye.N.

Overcoming sterility in three lily forms. Biul. Glav. bot. sada  
no.31:77-80 '58. (MIRA 12:5)

1.Glavnyy botanicheskiy sad AN SSSR.  
(Lilies) (Sterility in plants)

ZAYTSOVA, Yevgeniya Nikolayevna; SINITSINA, N.V., red.; FEDOTOVA, A.F., tekhn.  
red.

[Tulips] Tsvet'pamy. Moskva, Gos. izd-vo sel'khoz. lit-ry, 1958.  
86 p. (MIRA 11:10)

(Tulips)

BYLOV, V.N., kand. biol. nauk; ZAYTSEVA, Ye.N., kand. biol.  
nauk; MILOVIDOVA, N.D., red.; STREL'TSOVA, N.P.,  
red.

[Tulips; the best varieties] Tul'pary; luchshie sorta.  
Moskva, Kolos, 1965. 126 p. (MIRA 18:7)

ZAYTSEVA, YE. N.

USSR/Decorative Plants

M-11

Abs Jour : Ref Zhur - Biol., No 1, 1958, No 1822

Author : Ye. N. Zaytseva

Inst : Not Given

Title : Collection of Tulip Garden Forms in the Main Botanical Garden

Orig Pub : Byul. Gl. botan. sada. 1957, No 27, 51-54

Abstract : There are 358 varieties in the collection, most of which have been received from Holland. The features of 13 groups of the garden forms studied in 1956 are indicated. The distribution according to groups corresponds to the one accepted in the gardening classification abroad. A more simple working scheme is proposed, based on the division according to the blossoming periods; there is also a division into 3 groups as follows: early, middle and late, and one group based on the shape of the flower.

Card : 1/1

NAZAREVSKIY, S.I., kand.sel'skokhoz.nauk; BLAGOVIDOVA, M.S.; ZAYTSEVA, Ye.N.; KRASHNOVA, N.S., kand.sel'skokhoz.nauk; LIPINSKAYA, Ye.V.; LIPSKAYA, T.V. [deceased]; SHARONOV, V.A., kand.biolog.nauk; FILATOVA, Ye.P.; TSITSIN, N.V., akademik, otv.red.; OGOLEVETS, G.S., starshiy nauchnyy sotrudnik, red.izd-va; YEGOROVA, N.P., tekhn.red.

[Ornamental perennials; brief results of introduction at the Main Botanical Garden of the Academy of Sciences of the U.S.S.R.]  
Dekorativnye mnogoletniki; kratkie itogi introduktsii v Glavnom botanicheskom sadu Akademii nauk SSSR, 1960. 333 p.

(MIRA 13:7)

1. Moscow. Glavnyy botanicheskiy sad. 2. Otdel tsvetovodstva Glavnogo botanicheskogo sada AN SSSR (for all, except TSitsin, Yegorova).

(Plants, Ornamental) (Moscow--Plant introduction)

ZAYTSEVA, Ye.L.; GITINA, R.M.; YAKUBOVICH, A.Ya.; BRAZ, G.I.; PETROVA, L.G.;  
BAZOV, V.P.

Synthesis and some properties of aminoperfluorocarboxylic acid  
esters. Zhur. ob. khim. 34 no.8:2816 Ag '64. (MIRA 17:9)

ILLEGIBLE

Chemistry of Selenophene. VII. 5-Nitroselenophene-2- Aldehyde and 5-Nitroselenophene-2-Carboxylic Acid (1977-28-3-15/66)

above diacetate, 5-nitroselenophene-2-aldehyde was obtained, the yield being 68 % (43 % calculated for the selenophene-2-aldehyde introduced in the reaction). By oxidation with potassium bichlorate and sulfuric acid the corresponding carboxylic acid was formed, and by esterification with methyl alcohol its corresponding methyl ester (see reaction diagram). The determination of the dissociation constant of 5-nitroselenophene-2-carboxylic acid showed that it is ten times stronger than p-nitrobenzoic acid, and equivalent to o-nitrobenzoic acid. There are 1 table and 7 references, 4 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: July 5, 1957

Card 2/2

AUTHOR:

Yur'yev, Yu. K., Faytseva, Ye. L.

307/12-78-3- 5/56

TITLE:

Chemistry of Selenophene (Khimiya selenofena) XIV. 5-Nitroselenophene-2-Aldehyde and 5-Nitroselenophene-2-Carboxylic Acid (XIV. 5-Nitroselenofen-2-al'degid i 5-nitroselenofen-2-karbonovaya kislota)

ABSTRACT:

Zhurnal obshchey khimii, 1958, Vol. 29, No 6, p. 2164-2167 (USSR)

ABSTRACT:

One of the authors previously showed that selenophene can be easily formylated by dimethylformamide to form selenophene-2-aldehyde (ref 1). In the present paper, the authors used N-methyl formanilide with good results. These two methods rendered the selenophene-2-aldehyde accessible, and facilitated its nitration, an aim which was attained by the present investigation. The nitration of the aldehyde was effected in acetic anhydride by the action of fuming nitric acid (d 1.5), yielding the diacetate of 5-nitroselenophene-2-aldehyde. Its yield amounted to 63 % when 2-7 % of concentrated sulfuric acid was added to the nitric acid and to 20,5 % only in all other cases. In the hydrolysis of the

Card 1/2

SOV/79-29-4-9/77

Chemistry of Selenophene. XVI. 4- and 5-Nitroselenophene-2-aldehyde and the  
Synthesis of Isomeric Mononitroselenophenes

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State University)

SUBMITTED: March 12, 1958

Card 3/3

SOV/79-29-4-9/77

Chemistry of Selenophene. XVI. 4- and 5-Nitroselenophene-2-aldehyde and the  
Synthesis of Isomeric Mononitroselenophenes

selenophenes obtained in different ways. The product described by Umezawa thus represents, according to the investigations of the authors, a mixture of 2-nitroselenophene (30%) and 3-nitroselenophene (70%). From the nitration of selenophene-2-aldehyde with the nitration mixture a mixture results consisting of 4-nitroselenophene-2-aldehyde, 5-nitroselenophene-2-aldehyde, and 2,4-dinitroselenophene. The first and the latter were separated therefrom. The presence of 5-nitroselenophene-2-aldehyde was confirmed by the absorption spectrum in the ultraviolet range. The oxidation of 4-nitroselenophene-2-aldehyde and the decarboxylation of the resulting 4-nitroselenophene-2-carboxylic acid lead to the formation of 3-nitroselenophene. The absorption spectra in the ultraviolet range of the nitro derivatives of selenophene under investigation are similar to the spectra of the corresponding nitro derivatives of the furan- and thiophene series, which is due to the diene structure of this compound rather than to the nature of the hetero atom. There are 4 figures, 1 table, and 10 references, 2 of which are Soviet.

Card 2/3

5(3)

SOV/79-29-4-9/77

AUTHORS: Yur'yev, Yu. K., Zaytseva, Ye. L.

TITLE: Chemistry of Selenophene (Khimiya selenofena). XVI. 4- and 5-Nitroselenophene-2-aldehyde and the Synthesis of Isomeric Mononitroselenophenes (XVI. 4- i 5-Nitroselenofen-2-al'degid i sintez izomernykh mononitroselenofenov)

PERIODICAL: Zhurnal obshchey khimii, 1959, Vol 29, Nr 4, pp 1087-1093 (USSR)

ABSTRACT: In connection with the previous paper (1) the authors decarboxylated 5-nitroselenophene-2-carboxylic

in the quinoline medium in the presence of pulverized copper, and obtained a yield of 59.5% pure 2-nitroselenophene. Nitroselenophene synthesized in this way melted at 33.5-34° and differed from the preparation obtained by S. Umezawa (Ref 3) by direct nitration of selenophene which melted at 45-46°. As the repeated recrystallization of 2-nitroselenophene synthesized by the authors did not alter its melting point and the elementary analysis pointed to this, they concluded that the preparation of Umezawa was a mixture of 2- and 3-nitroselenophene, and that this result could be supported by investigation of the absorption spectra of isomeric mononitro-

Card 1/3

ZAYTSEVA, YE. KH.

Chemical Abstracts  
May 25, 1954  
Fermentation Industries

Use of bentonite clay "gil'abi" for clarification of wine.  
D. M. Gendukov and E. Kh. Zaitseva ~~Azerbaijan Agr.~~  
~~Inst.~~, *Vinodelie i Vinogradarstvo S.S.S.R.* 13, No. 10  
(Whole No. 142), 12-16(1953).--Gil'abi, a local form of  
bentonite clay, shows up favorably as an adsorbent for  
clarifying wine. Some wine grapes which do not yield to  
clarification with the usual materials are readily purified  
with gil'abi. In a comparison of 4 samples after treatment  
with 4 different clays, gil'abi clay-treated samples showed  
greatest decrease in albumin content. S. B. Radling

YUR'YEV, Yu.K.; ZAYTSEVA, Ye.L.; ROZANTSEV, G.G.

Chemistry of selenophene. Part 31: Reactions of 5-nitro-2-selenophenecarboxylic acid chloride with 5-nitro-2-diazoacetoselenophene. Zhur. ob. khim. 30 no.11:3672-3675 N'60.  
(MIRA 13:11)

1. Moskovskiy gosudarstvennyy universitet.  
(Selenophenecarboxylic acid) (Selenophene)

ZAYTSEVA, Ye. I.

Journal of Applied Chemistry  
June 1954  
Fuel and Fuel Products

3  
Rectification of hydrocarbon gases. K. P. Lavrovskii, A. M. Brodskii, and Ye. I. Zaytseva (*Dokl. Akad. Nauk, SSSR*, 1953, 80, 76-78).—Possibility of separation of hydrocarbon gases adsorbed on activated charcoal by passing a stream of hot inert gas ( $N_2$ ) through the charcoal is investigated in laboratory experiments. The rates of desorption of pure gases decrease with the increase of the no. of C atoms: ethylene > propene > n-butylenes. Owing to this difference in desorption rates a certain degree of separation of ethylene-propene mixtures is possible. Theoretical treatment of the desorption rates based on the Freundlich adsorption isotherm is given.  
S. K. LACHOWICZ.

10/29/54  
SP

ZAYTSEVA, Ye. I.

ZAYTSEVA, Ye.I., kandidat meditsinskikh nauk

Abdominal syndromes. Klin. med. 32 no.5:82 My '54. (MIRA 7:7)

1. Iz kafedry gosptal'noy terapii (zav. prof. P.N.Stepanov)  
Minskogo meditsinskogo instituta.  
(ABDOMEN, diseases,)

\*

ZAYTSEVA, Ye.L.; YAKUBOVICH, A. Ya.; BRAZ, G.I.; BAZOV, V.P.

Esters of bisaminodipic and -terephthalic acids. Zhur. ob.  
khim. 34 no.11:3709-3713 N '64 (MIRA 18:1)

1. Fiziko-khimicheskiy institut imeni L. Ya. Karpova.

YAKUBOVICH, A.Ya.; ZAYTSEVA, Ye.L.; BAZOV, V.P.

Synthesis of fluorinated aliphatic aromatic diketones. Zhur. ob.  
khim. 35 no.5:848-850 My '65. (MIRA 18:6)

1. Fiziko-khimicheskiy institut imeni Karpova, Moskva.

ACC NR: AP7011830

was studied for an ester in which  $R = R' = C_2H_5$ . The isomerization could be conducted in both directions; in the preparation of compound (1) at temperatures above  $85^\circ$ , a mixture of the esters (I) and (II) was obtained. Orig. art. has: 1 formula.

[JPRS: 40,351]

Card 2/2

ACC NR: AP7011830

SOURCE CODE: UR/0079/66/036/010/1861/1861

AUTHOR: Pilatova, I. M.; Zaytseva, Ye. L.; Yakubovich, A. Ya.

ORG: Physicochemical Institute imeni L. Ya. Karpov (Fiziko-khimicheskiy institut)

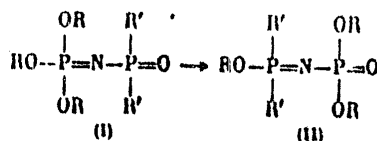
TITLE: New type of rearrangement of esters of the phosphazene series

SOURCE: Zhurnal obshchey khimii, v. 36, no. 10, 1966, 1861

TOPIC TAGS: ester, organic phosphorus compound, organic nitrogen compound, isomerization

SUB CODE: 07

ABSTRACT: The authors succeeded in observing a rearrangement for phosphazenes differing from the normal phosphazene rearrangement. It was proposed that the new rearrangement be called the phosphazenephosphoxide rearrangement. The isomerization



Card 1/2

UDC: 547.26.118

0135-

0425

ZAYTSEVA, Ye.L.; YAKUBOVICH, A.Ya.; BRAZ, G.I.; BAZOV, V.P.

Synthesis in the 1,3,5-triazine series. Part 3: Benzoylhydroxyl-  
kyltriazines. Zhur. ob. khim. 34 no.9:2976-2979 S '64. (MIRA 17:11)

1. Fiziko-khimicheskiy institut imeni I.Ya. Karpova.

ZAYTSEVA, Ye. L.; BRAZ, G. I.; YAKUBOVICH, A. Ya.; BAZOV, V. P.

Syntheses in the series of 1,3,5-triazine. Part 2: Preparation of mixed 2,4,6-trialkyl-1,3,5-triazines from imino ethers. Zhur. ob. khim. 33 no.1:199-202 '63. (MIRA 16:1)

1. Fiziko-khimicheskiy institut imeni L. Ya. Karpova.

(Triazine) (Ethers)

YAKUBOVICH, A.Ya.; ZAYTSEVA, Ye.L.; BRAZ, G.I.; BAZOV, V.P.

Syntheses in 1,3,5-triazine series. Part 1: Preparation  
of 2,4,6-trialkyl (aryl)-1,3,5-triazines from iminoesters.  
Zhur.ob.khim. 32 no.10:3409-3417 0 '62. (MIRA 15:11)

1. Fiziko-khimicheskiy institut imeni L.Ya. Karpova.  
(Triazine) (Esters)

Synthesis of mixed .....

S/063/62/007/002/012/014  
A057/A126

(where R = positions 4 and 6, and R' = position 2 in the symmetric triazine), b) R = CH<sub>3</sub>, R' = n-C<sub>3</sub>H<sub>7</sub>, c) R = n-C<sub>3</sub>H<sub>7</sub>, R' = CH<sub>3</sub>, d) R = R' = n-C<sub>3</sub>H<sub>7</sub>. The composition of the mixture depends upon the proportion of the initial iminoesters. By distillation over metallic sodium the pure esters b) and c) could be separated and their characteristics determined. 2,4,6-tris-( $\beta$ -carboethoxybutyl)-triazine was synthesized by cyclization of the diethyl ester of mono-iminoadipic acid and specified. A structurized polymer was prepared by cyclization of the diethylester of bis-iminoadipic acid. The polymer is a yellow, crumbling substance, not soluble in common organic solvents, but swelling in benzene. The same polymer can be obtained from dibenzylester of bis-iminoadipic acid. According to the infrared spectrum the polymer contains triazine rings, and apparently C = NH groups. A triazine polymer can be obtained also by combined cyclization of diethyl ester of bis-imino adipic acid and ethyl ester of imino acetic acid. There are 1 table and 3 references.

ASSOCIATION: Fiziko-khimicheskiy institut im. L.Ya. Karpova (Physico-chemical Institute imeni L.Ya. Karpov) X

SUBMITTED: December 22, 1961

Card 2/2

36038 S/063/62/007/002/012/014  
A057/A126

11.2715

AUTHORS: Zaytseva, Ye.L., Braz, G.I., Yakubovich, A.Ya., Bazov, V.P.,  
Petrova, L.G., Gitina, R.M.

TITLE: Synthesis of mixed 2,4,6-trialkyl-1,3,5-triazines and polymer  
triazine compounds from iminoesters

PERIODICAL: Zhurnal vsesoyuznogo khimicheskogo obshchestva imeni D.I.  
Mendeleyeva, v. 7, no. 2, 1962, 232 - 233

TEXT: In continuation of earlier experiments in which symmetric 2,4,6-  
-trialkyl- and 2,4,6-triaryl-substituted 1,3,5-triazines were prepared by cycli-  
zation of iminoesters in the presence of catalytic quantities of their salts,  
2,4,6-substituted triazines mixed in an analogous way were prepared by combined  
cyclization with esters of different iminoacids in the present investigation.  
When the paper published earlier was already in press, it was observed, that  
F. Schaefer, and G. Peters reported on the same subject [Ref. 2: J. Org. Chem.,  
26, 2778 (1961)]. If a mixture of ethyl esters of imino acid and imino butyric  
acid are cyclized in the presence of 6 mole% of the chlorohydrate of iminoesters,  
a mixture of four substituted triazines is obtained, namely a)  $R = R' = CH_3$

Card 1/2

YAKUBOVICH, A.Ya.; ZAYTSEVA, Ye.L.; BRAZ, G.I.; BAZOV, V.P.

Synthesis of 2,4,6-trialkyl- and 2,4,6-triaryl-1,3,5-triazines  
from imnoesters. Zhur.VKHO 7 no.2:229-230 '62. (MIRA 15:4)

1. Fiziko-khimicheskiy institut im. L.Ya.Karpova.  
(Triazine) (Esters)

86505

Chemistry of Selenophene. XXXI. Reactions of S/079/60/030/011/011/026  
the Acid Chloride of 5-Nitro-selenophene-2- B001/B066  
carboxylic Acid and of 5-Nitro-2-diazoacetoselenophene

In the same way, 5-nitro-2-chloro-acetofuran (96%) and 5-nitro-2-bromo-  
acetofuran (85.5%) (Ref.4) were synthesized. There are 5 references:  
4 Soviet and 1 US.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet (Moscow State  
University) X

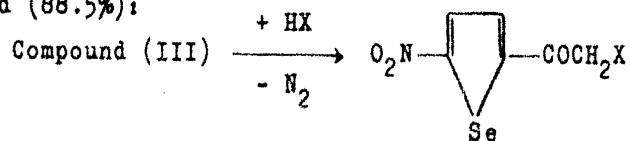
SUBMITTED: January 1, 1960

Card 3/3

86505

Chemistry of Selenophene. XXXI. Reactions of S/079/60/030/011/011/026  
 the Acid Chloride of 5-Nitro-selenophene-2- B001/B066  
 carboxylic Acid and of 5-Nitro-2-diazoacetoselenophene

obtained from nitroso-methyl urea (Ref.2) had to be first distilled since also traces of alkali lye cause a resinification and decrease the yield. According to the US patent (Ref.3), 5-nitro-2-diazoacetofuran was obtained in a yield of 83.5% by this method in the nitrofuran series by reaction of the acid chloride of the corresponding acid with diazomethane; in the thiophene series, this reaction has so far not been investigated. On hydrolysis of 5-nitro-2-diazoacetoselenophene with dilute sulfuric acid, the authors obtained 5-nitro-2-hydroxy-acetoselenophene (IV) in good yield (96%). By treating diazo ketone with HCl or HBr, 5-nitro-2-chloro-acetoselenophenes (V) is formed (92.5%), or, accordingly, the bromine product (VI) (84%); on treatment with acetic acid, the compound (VII) was obtained (88.5%):



(IV) X = OH, (V) X = Cl, (VI) X = Br, (VII) X = OCOCH<sub>3</sub>.

Card 2/3

86505

5.3700 1209, 1281, 1273

S/079/60/030/011/011/026  
B001/B066

AUTHORS: Yur'yev, Yu. K., Zaytseva, Ye. L., and Rozantsev, G. G.

TITLE: Chemistry of Selenophene. XXXI. Reactions of the Acid  
Chloride of 5-Nitro-selenophene-2-carboxylic Acid and of  
5-Nitro-2-diazoacetoselenophene

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 11, pp.3672-3675

TEXT: In the present paper, the above acid chloride (I), from which 5-nitro-2-acetoselenophene had been obtained previously (Ref.1), was used in the synthesis of a number of substituted amides of 5-nitro-selenophene-2-carboxylic acid (II), as well as of  $\omega$ -derivatives of 5-nitro-2-acetoselenophene. On reaction of this acid chloride with dimethyl amine, pyrrolidine, piperidine, morpholine, the dimethyl amide of 5-nitro-selenophene-2-carboxylic acid; 1-(5'-nitro-selenenoyl-2')-pyrrolidine; 1-(5'-nitro-selenenoyl-2')-piperidine; N-(5-nitro-selenenoyl-2)-morpholine were synthesized accordingly. Compound (I) was also allowed to react with diazomethane which gave 5-nitro-2-diazoacetoselenophene (III) in a yield of 70.5%. The ether solution of diazomethane

Card 1/3

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Chemistry of Selenophene. XXVIII. Reactions  
of 4-Nitro- and 5-Nitro-2-acetoselenophene

S/079/60/030/007/029/039/XX  
B001/B066

4 Soviet, 1 US, 1 German, and 2 Italian.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet  
(Moscow State University)

SUBMITTED: July 10, 1959

Card 3/3

Chemistry of Selenophene. XXVIII. Reactions  
of 4-Nitro- and 5-Nitro-2-acetoselenophene

S/079/60/030/007/029/039/XX  
B001/B066

in this way. Its bromination was only possible with bromine in glacial acetic acid (85.5%). Both nitro-2-bromo-acetoselenophenes were allowed to react with urotropin to convert them to the corresponding  $\alpha$ -amino ketones of the selenophene series. In the first stage of this synthesis, the complex of 4-nitro-2-bromo-acetoselenophene with urotropin is formed easily (73%) when mixing the components in an equimolecular ratio in chloroform, and when the mixture is allowed to stand for two days at room temperature. This was not possible in the case of 5-nitro-2-acetoselenophene since the complex yield was only 38%. When the reaction was carried out in dry chloro benzene at 50° by the method of Ref. 7, the urotropin complex of 5-nitro-2-bromo-acetoselenophene was obtained in an 83% yield. Hydrolysis of the complex of 4-nitro-2-bromo-acetoselenophene with urotropin took place easily with a mixture of alcohol and concentrated hydrochloric acid in the cold within 48 hours (Ref. 7). Hydrolysis of the complex of 5-nitro-2-bromo-acetoselenophene with urotropin was only possible with a much smaller quantity of hydrochloric acid in alcohol and by distilling off the resultant diethyl formal. The hydrolysis of these two complexes, with subsequent acetylation, thus gives 4-nitro- and 5-nitro-2-acetyl-amino-acetoselenophenes. The authors mention a paper by N. O. Saldakol. There are 8 references:

Card 2/3

S/079/60/1150/007/029/039/XX  
B001/B066

AUTHORS: Yuriyev, Yu. K., Zaytseva, Ye. I., and Nikiforova, A. M.

TITLE: Chemistry of Selenophene. XXVIII. Reactions of 4-Nitro- and 5-Nitro-2-acetoselenophene

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 7, pp. 2209-2214

TEXT: The authors of the present paper synthesized derivatives of 5-nitro- and 4-nitro-2-acetoselenophenes which they had obtained in Refs. 1, 2. The former was condensed with various hydrazine derivatives by a method described in Ref. 3. The following compounds resulted: 4-phenyl semicarbazone (96%), isonicotinoyl hydrazone (60%), furoyl hydrazone (33.5%), and cyano-acetyl hydrazone (83.5%) of 5-nitro-2-acetoselenophene. Bromination of 5-nitro- and 4-nitro-2-acetoselenophene was made with bromine in glacial acetic acid and with dioxane dibromide. When treating 5-nitro-2-acetoselenophene with bromine in glacial acetic acid at 80°C, the authors obtained 5-nitro-2-bromo-acetoselenophene (73.5%), but also resinous by-products and, apparently, some dibromide. Bromination of this nitro ketone with dioxane dibromide at room temperature gave a fairly pure 5-nitro-2-bromo-acetoselenophene (80%). 4-nitro-2-acetoselenophene did not react

Card 1/3

Chemistry of Selenophene. XXVII. Composition S/079/60/030/007/028/039/XX  
of the Nitration Product of Selenophene B001/B066

selenophene yield from 15 to 25%. A higher yield is, apparently, prevented by the considerable resinification of the product in the course of reaction. There are 1 figure, 1 table, and 5 references: 1 Soviet, 1 French, 2 German, and 1 Japanese.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet  
(Moscow State University)

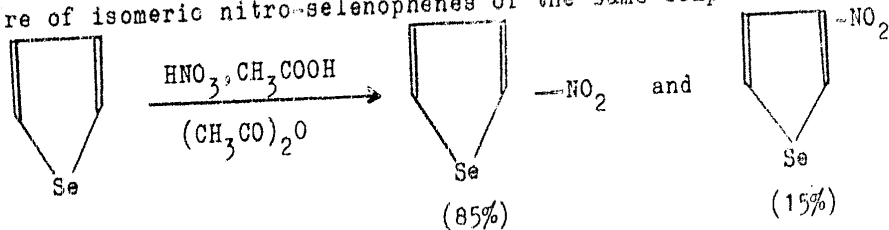
SUBMITTED: July 1, 1959

Card 3/3

Chemistry of Selenophene. XXVII. Composition of the Nitration Product of Selenophene

S/079/60/030/007/028/039/XX  
B001/B066

the nitration product of selenophene, which was taken by the method of S. Umezawa (Ref. 2) in pure condition. A comparison of the curves of the ultraviolet spectra of the nitro-selenophene samples and of the nitration product of selenophene (Diagram) confirmed the authors' assumption and indicated that the latter compound is a mixture of mononitro-selenophenes in which the  $\alpha$ -isomer is actually predominant: The content of 2-nitro-selenophene in the mixture is 85%, whereas 3-nitro-selenophene has only a 15% yield. The adsorption curve of this mixture of nitration products of selenophene corresponds to the adsorption curve of an artificial mixture of isomeric nitro-selenophenes of the same composition:



By improving the method of separating the nitration products of selenophene from the reaction mixture it was possible to increase the nitro

S/079/60/030/007/028/039/XX  
B001/B066

AUTHORS: Yur'yev, Yu. K., Zaytseva, Ye. L., and Rozantsev, G. G.

TITLE: Chemistry of Selenophene. XXVII. Composition of the Nitration Product of Selenophene

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 7, pp. 2207-2209

TEXT: It may be seen from the papers of Refs. 1-5 on the nitration of selenophene that the largest component of the reaction product obtained by nitration of selenophene is 2-nitro-selenophene in its  $\alpha$ -form, and that the  $\alpha$ -form, being a lower-melting form which is more easily soluble, "decrystallizes" only after further treatment, i.e., by separating the crystals from the oil fraction and by repeated crystallization. This assumption is supported by the fact that the  $\alpha$ -form is lost to a larger extent than the  $\beta$ -form, i.e., 3-nitro-selenophene. The loss in the  $\alpha$ -form and the concentration of the  $\beta$ -form in crystals last until both begin to crystallize in the ratio mentioned above. To confirm the correctness of this conclusion, the ultraviolet absorption spectra of pure 2-nitro- and 3-nitro-selenophene were studied (Ref. 1) and compared with the spectrum of

Card 1/3

Chemistry of Selenophene. XXV. 4-Nitro-  
2-Acetoselenophene and 4-Nitroselenophene-  
2-Carboxylic Acid

78371

NOV/11-30-5-15/61

The ultraviolet absorption maxima, of 4-nitro- and 5-nitro-2-acetoselenophene are 260 m $\mu$  and 315 m $\mu$ , respectively. There are 2 figures; and 11 references, 4 Soviet, 2 U.S., 2 Dutch, 1 U.K., 1 German, 1 Japanese. The U.S. references are: Blatt, A., Bach, S., Kresch, L., J. Org. Chem., 22, 1693 (1957); Fove, W. O., Heffern, J. J., Feldman, E. L., J. Am. Chem. Soc., 76, 1378 (1954).

ASSOCIATION: Moscow State University (Moskovskiy gosudarstvennyy universitet)

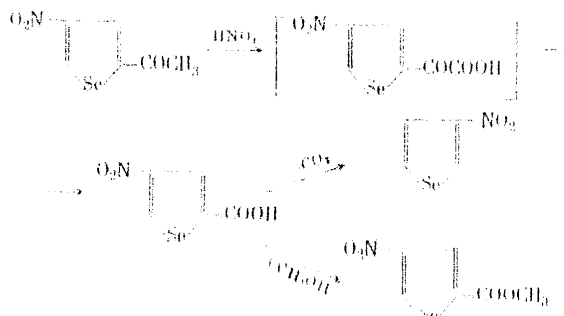
SUBMITTED: March 20, 1959

Card 3/3

Chemistry of Selenophene. XXV. 4-Nitro-  
2-Acetoselenophene and 4-Nitroselenophene-  
2-Carboxylic Acid

782/1  
SOV/19-37-3-25/52

Oxidation of 4-nitro-2-acetoselenophene with dilute nitric acid yields a mixture of 4-nitroselenophene-2-carboxylic acid and 4-nitroselenophene-2-glyoxylic acid, which on further oxidation with hydrogen peroxide, yields 4-nitroselenophene-2-carboxylic acid (yield 36%), mp 170-171°. Esterification of this acid yields the methyl ester of 4-nitroselenophene-2-carboxylic acid (yield 73%), mp 103.5-104°, and decarboxylation, 3-nitroselenophene (yield 50%), mp 77.5-78°.



Card 2/3

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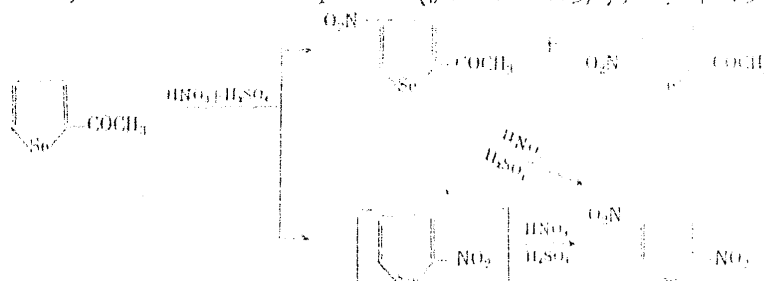
101/19-31-3-15/46

AUTHORS: Yur'yev, Yu. K., Zaytseva, Ye. L.

TITLE: Chemistry of Selenophene. XXV. 4-Nitro-2-Acetoselenophene and 4-Nitroselenophene-2-Carboxylic Acid

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 3, pp 850-864 (USSR)

ABSTRACT: Nitration of 2-acetoselenophene yields a mixture of two products: 4-nitro-2-acetoselenophene (yield 50%), mp 123-123.5° and 5-nitro-2-acetoselenophene (yield 2.5%), and 2,4-dinitroselenophene (yield 41.5%), mp 73.5-75°.



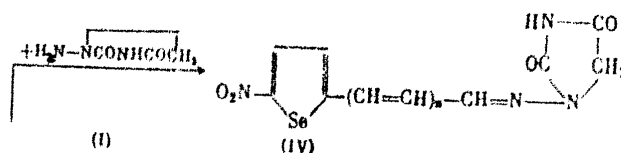
Card 1/3

## Chemistry of Selenophene, XXIV

77358

SOV/79-30-1-19/78

Condensation of 5-nitroselenophene-2-aldehyde and  $\beta$ -(5-nitroselenienyl-2)-acrolein with 1-amino-2-thiohydantoin yields the following compounds, not described in literature: 1-(5-nitroselenenal-2)-amino-2-thiohydantoin, yield 81.5%, mp 263-264° (decomp., from alcohol); 1-[ $\beta$ -(5-nitroselenienyl-2)allylidene]amino-2-thiohydantoin, yield 84%, mp 262-264° (decomp., from alcohol); 1-(5-nitroselenenal-2)amino-2-thiohydantoin, yield 95%, mp 248-250° (decomp., from alcohol); and 1-[ $\beta$ -(5-nitroselenienyl-2)allylidene]amino-2-thiohydantoin, yield 93%, mp 265-267° (decomp., from acetone), respectively.



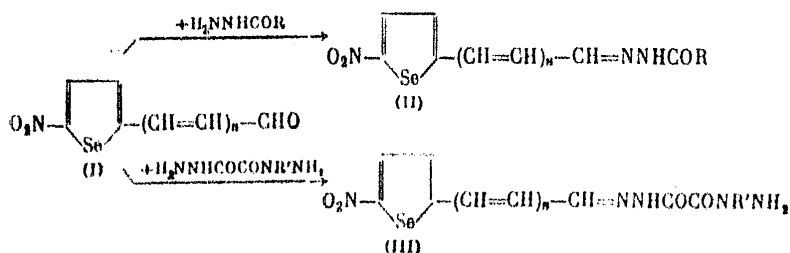
Card 3/4

## Chemistry of Selenophene. XXIV

77358

SOV/79-30-1-19/78

isonicotinoylhydrazone, yield 91%, mp 243-244° (decomp, from alcohol); 1- $\beta$ -(5-nitroselenienyl-2)allylidene]-2-isonicotinoylhydrazone, yield 94%, mp 244-245° (decomp, from alcohol). Reaction of 5-nitroselenophene-2-aldehyde with semioxamazine and 5-( $\beta$ -hydroxyethyl)-semioxamazine yields the following semioxamazones, not described in literature: 1-(5-nitroselenenal-2)semioxamazone, yield  $\approx$  100%, mp 252-253° (decomp, from alcohol), and 1-(5-nitroselenenal-2)-5-( $\beta$ -hydroxyethyl)-semioxamazone, yield 90%, mp 251-252° (decomp, from alcohol).



(I  $n = 0 \text{ \& } 1$ ); (II  $n = 0 \text{ \& } 1$ ; R =  $\text{CH}_2\text{CN}$ ,  $\text{C}_6\text{H}_5\text{O}$ ,  $\text{C}_6\text{H}_5\text{N}$ ); (III  $n = 0$ ; R' = H,  $\text{CH}_2\text{CH}_2\text{OH}$ ).

Card 2/4

5.3610

77358  
SOV/79-30-1-19/78

AUTHORS: Yur'yev, Yu. K., Zaytseva, Ye. L.

TITLE: Chemistry of Selenophene. XXIV. Condensation of 5-Nitroselenophene-2-aldehyde and  $\beta$ -(5-Nitroselenienyl-2)-acrolein With Hydrazine Derivatives

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol 30, Nr 1, pp 98-101 (USSR)

ABSTRACT: Condensation of 5-nitroselenophene-2-aldehyde and  $\beta$ -(5-nitroselenienyl-2)-acrolein with hydrazides of cyanacetic, furancarboxylic, and isonicotinic acids yields the following compounds, not described in literature: 1-(5-nitroselenenal-2)-2-cyanoacetylhydrazone, yield 93%, mp 241-242°; 1-(5-nitroselenenal-2)-2-(2-furoyl)hydrazone, yield  $\approx$  100%, mp 266-267° (decomp, from alcohol); 1-[ $\beta$ -(5-nitroselenienyl-2)-allylidene]-2-cyanoacetylhydrazone, yield  $\approx$  100%, mp 219-221° (decomp, from alcohol); 1-[ $\beta$ -(5-nitroselenienyl-2)-allylidene]-2-(2-furoyl)hydrazone, yield 96%, mp 225-227° (decomp, from alcohol); 1-(5-nitroselenenal-2)-2-

Card 1/4